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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/584,101 | 04/05/2007 | Wolfgang Guhr | 19357-107359 | 3429 |
| 7590 | 09/15/2009 | | EXAMINER | |
| Robin W. Asher Clark Hill 500 Woodward Avenue Suite 3500 Detroit, MI 48226-3435 | | | | REESE, ROBERT T |
| | | ART UNIT | | PAPER NUMBER |
| | | 3657 | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/584,101 | GUHR ET AL. | |
| | Examiner | Art Unit | |
| | ROBERT T. REESE | 3657 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 June 2009.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 14-29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

The amendment filed June 23, 2009, has been entered. Claims 1-13 have been cancelled, and claims 14-29 have been added. Therefore, claims 14-29 are currently pending in the application.

Specification

1. In response to the amendment, since claim 3 has been canceled, the objection to the specification is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 14- 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geis et al. (DE4326710) in view of Massey et al. (5,866,647).

As per claim 14, Geis et al., discloses: An automatic tensioner comprising: a basic part (1) that is adapted be coupled to an engine, the basic part having a pivot axis (depicted in figure 1); a tensioning part (2) that is coupled to the basic part and pivotable about the pivot axis; a helical torsion spring (5) extending along the pivot axis, the helical torsion spring biasing the tensioning part (2) about the pivot axis in a predetermined direction; a spring sleeve (3) comprising a first portion (depicted in figure 1), which is parallel to the pivot axis, and a second portion that is perpendicular to the pivot axis, the first portion being disposed between the tensioning part and the helical torsion spring, a first side of the second portion (depicted in figure 1) abutting an axial end of the helical torsion spring, a second side of the second portion that is opposite the first side being in abutment with the basic part; and a wrapping bush (8) being disposed between the first portion of the spring sleeve and the helical torsion spring; the helical torsion spring applying a radial enveloping force to the wrapping bush that is communicated to the first portion of the spring sleeve to cause the first portion of the spring sleeve to grippingly engage the tensioning part (depicted in figure 1).

However, Geis et al., does not disclose: wrapping bush formed of reinforced plastic.

Massey et al. discloses a polymeric based composite bearing which is formed of reinforced thermoplastic material (abstract).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the automatic tensioner of Geis et al., with the

reinforced thermoplastic material of Massey et al. to improve the strength and friction properties of wrapping bush.

As per claim 15, Massey et al., teaches: the reinforced plastic comprises fibers (16).

As per claim 16, Massey et al., teaches: the reinforcing fibers are formed of glass (Column 3, line 5).

As per claim 17, Massey et al., teaches: the reinforced plastic comprises reinforcing spheres (18).

As per claim 18, Massey et al., teaches: the reinforcing spheres are formed of glass (Column 3, lines 23-24).

As per claim 19, Geis et al., discloses: the wrapping bush (8) can accommodate both left-handed and right-handed helical springs (It is construed that one with ordinary skill in the art at the time of the invention would select the proper spring based on the layout of the automobile engine).

As per claim 20, Geis et al., discloses: a peripheral edge of the wrapping bush (8) comprises inclines that correspond in one area to the course of a left-handed helical spring and in another area to the course of a right-handed helical spring (It is construed that one with ordinary skill in the art at the time of the invention would select the proper bush inclination based on the spring used in the automatic tensioner).

As per claims 21 and 22, the combination of Geis et al. and Massey et al. discloses all of the limitations of claim 14 above.

However, the combination of Geis et al. and Massey et al. does not disclose:
(Claim 21) the wrapping bush is enveloped by less than one full turn of the helical torsion spring, or (Claim 22) the wrapping bush is enveloped by at least one half turn of the helical torsion spring but not more than 0.7 turns of the helical torsion spring.

It could be ascertained by one with ordinary skill in the art at the time of the invention to optimize the automatic tensioner of the combination of Geis et al. and Massey et al. by varying the length of the wrap bushing to simplify the construction of the automatic tensioner. See MPEP 2144.04 (IV) A.

As per claim 23, Geis et al., discloses: the wrapping bush (8) on a free end thereof comprises a chamfered peripheral edge (depicted in figure 1).

As per claim 24, Geis et al., discloses: a peripheral edge of the wrapping bush (8) opposite a free end comprises at least one engaging feature that engages with a mating engaging feature provided in the spring sleeve (3) so as to resist rotation (depicted in figure 1).

As per claim 25, Geis et al. discloses: an inside surface of the spring sleeve comprises at least one depression for receiving lubricant (Depicted in figure 1 as a gap on the right hand side facing element 9. This gap between the sleeve and the tension member is construed to represent the recited depression.).

As per claim 26, Geis et al. discloses the depression extends in an axial direction that is parallel to the pivot axis (Depicted in figure 1).

As per claim 27, Geis et al. discloses that the depression has a notched design in the cross sectional view (It is construed that the gap shown in figure 1 is a notched surface).

As per claim 28, Geis et al., discloses: the second portion of the spring sleeve comprises a plurality of discrete portions that are circumferentially spaced apart from one another (depicted in figure 1).

As per claim 29, Geis et al., discloses: the second portion of the spring sleeve comprises a projecting spring end support (depicted in figure 1).

Response to Arguments

5. Applicant's arguments with respect to claim 3 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT T. REESE whose telephone number is (571) 270-5794. The examiner can normally be reached on M_F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RTR

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art
Unit 3657